



Patent Application Publication Jan. 16, 2003 Sheet 17 of 22 US 20030016566 A1

FIG. 29

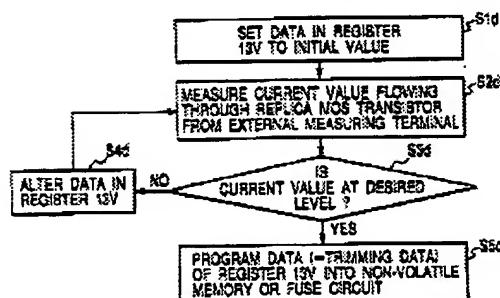


FIG. 30(A)

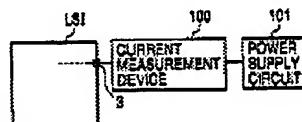
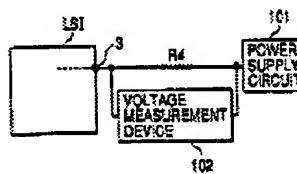


FIG. 30(B)



Ready

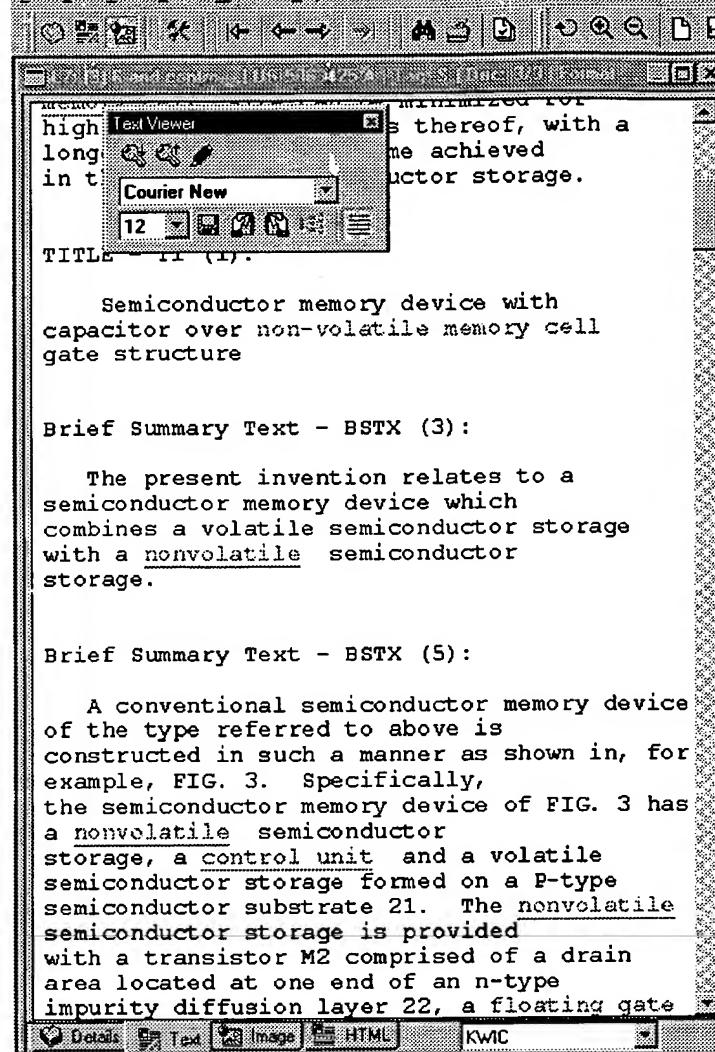


Fig. 2

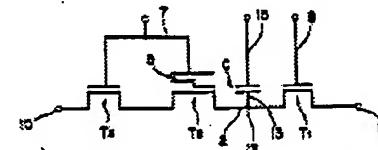
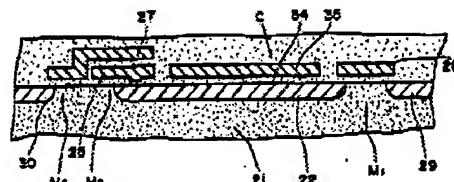


FIG. 3 (PRIOR ART)



regi Text Viewer DM memory cell  
arra generating  
mean supplying means of  
the age system  
of t y are formed and to  
whic pp is  
applied is surrounded by a p-well region as  
small as possible. This structure  
avoids latch up caused by a floating  
substrate.

**Brief Summary Text - BSTX (56):**

In a semiconductor integrated circuit for a microcomputer according to the third invention, a supply voltage Vcc system which includes a CPU, a ROM, a RAM, an input/output unit, and EEPROM control systems and to which a high voltage Vpp is not applied is formed in a twin-well region. This structure realizes a line width of 1 .mu.m or less, enables micromachining of a circuit, and improves the degree of integration. On the other hand, a portion which includes an EEPROM memory cell array and an EEPROM peripheral high-voltage system and to which the high voltage Vpp is applied is formed, for example, on a p-type semiconductor substrate and has an NMOS structure. This structure minimizes a substrate effect, and enables a charge pump, Vpp switches, and memory cells to operate normally.

